

HORTICULTURE IN CANADA

Horticulture is the science and art of growing fruits, vegetables, flowers and ornamental plants.

In Canada, the horticulture industry includes field, greenhouse and indoor grown fruits and vegetables, thousands of varieties of flowers and ornamental plants, ginseng, maple and honey products.¹ There are also sod or turf farmers, herb farmers and Christmas tree farmers.

Over 120 different fruit and vegetable crops are commercially grown in Canada.²

Fruit or vegetable?

A **fruit** develops from a flower and contains the plant's seeds.

Vegetables generally come from other parts of a plant, e.g., carrots (roots), lettuce (leaves), celery (stalks), tubers (potatoes), bulbs (onion), flower buds (broccoli). Fruits are associated with sweet flavours, while vegetables are savoury. The exceptions are tomatoes, cucumbers and peppers which are botanically fruits, but are commonly considered vegetables because of their taste.



DID YOU KNOW?



Potatoes are the largest field vegetable crop in Canada by income generated,³ and tomatoes are our largest greenhouse vegetable crop by weight (metric tonnes).⁴



Canada is among the world leaders in cranberry and blueberry production.



Over 90% of Canadian maple syrup is produced in Quebec.⁵



More than 80% of honey comes from the Prairie Provinces (Alberta, Saskatchewan and Manitoba).⁶



Greenhouse pepper harvest

OUTDOORS OR GREENHOUSE?

Whether a farmer grows horticulture crops outdoors or in a greenhouse depends on a specific crop's growing requirements, consumer demand and the best way for farmers to generate income producing that crop. For example, English-type seedless cucumbers are grown in greenhouses all year round in Canada due to high consumer demand and affordable computer controlled growing environments, whereas crops such as potatoes and carrots are grown outdoors because of the amount of space required to produce sufficient volumes to make growing them cost effective.

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IMPROVED AVAILABILITY AND MORE SELECTION

Agricultural innovation and new technologies have increased **yields** (amounts produced) and the types of horticultural crops grown in Canada. Examples:

- **Crop row covers** to protect crops from sun, weather, insect and bird damage
- **Energy efficient LED** lighting in greenhouses for better plant growth
- **Improved plant varieties** bred for the Canadian climate

Improvements in year round storage, packaging technology and transportation have also contributed to a wider variety of Canadian-produced fruits and vegetables being available for longer periods.

Strawberry plant breeding has resulted in plants with better disease resistance that will produce berries from early summer to late fall.



U-Pick strawberry farm



Trickle irrigation on lettuce

The need for irrigation

Most fruit and vegetable farms in Canada rely on irrigation. This involves drawing water from wells, ponds, lakes or rivers to apply to crops. Many crops require a uniform supply of moisture throughout the growing season that rain alone doesn't provide. For example, the average rainfall in Ontario is 70 mm/month during the growing season which is only 65% of the water needed for the best growing conditions.⁷

The amount of water a crop requires depends on climate, precipitation (rain and snow), the type of crop grown and the irrigation method used. Many greenhouses recirculate the same water during the lifecycle of crops.

RESPONDING TO CONSUMER DEMAND

What Canadians eat is constantly changing as a result of shifts in demographics and food trends. Farmers must adapt and grow crops that meet changing demand. For example, through plant breeding, scientists have developed varieties of warm climate crops such as eggplant, okra and sweet potatoes that thrive in the Canadian climate.

